

INJ 1100-T - Injector



2703009

<https://www.phoenixcontact.com/sg/products/2703009>

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PoE injector, 30 W, two RJ45 jacks, 10/100/1000 Mbps, DIN rail mounting, IP20, expanded temperature range of -40°C ... 75°C, potential separation

Product description

The midspan injectors connect Ethernet devices without PoE (e.g., switches) to PoE-capable end devices (e.g., IP cameras). As power sourcing equipment (PSE), the injector supplies the required power to a powered device (PD) via the data cable. The injector and end device negotiate the electrical power requirements autonomously.

Your advantages

- Extended temperature range of -40 °C ... +75 °C
- Extended supply voltage range of 18 V DC ... 57 V DC, redundant
- Electrical isolation of the internal power supply unit for protection against short circuits on the PoE side
- 10/100/1000 Mbps

Commercial data

Item number	2703009
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	*****
Product key	DNC351
Catalog page	Page 345 (C-6-2019)
GTIN	4055626462974
Weight per piece (including packing)	432.4 g
Weight per piece (excluding packing)	338.18 g
Customs tariff number	85044083
Country of origin	DE

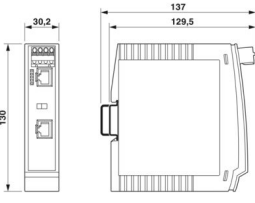
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Technical data

Dimensions

Dimensional drawing	
Width	30.2 mm
Height	130 mm
Depth	120 mm

Notes

Note on application

Note on application	Only for industrial use
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Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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Material specifications

Color (Housing)	light gray (RAL 7035)
Material (Housing)	Plastic
Flammability rating according to UL 94	V0

Mounting

Mounting type	DIN rail mounting
Mounting position	vertical

Interfaces

Basic functions	PSE/Midspan, compliant with IEEE 802.3af, at
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Data: Power over Ethernet

Serial transmission speed	10/100/1000 Mbps
Frequency range	125 MHz
Connection method	RJ45 jack
Note on the connection method	CAT5e
No. of channels	1
Pin assignment	1:1
Transmission length	100 m (including patch cables)
Output nominal voltage	54 V DC (PoE)
Output power	30 W
Maximum output power	40 W (UL)

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Data: Ethernet

Connection method	RJ45 jack
Note on the connection method	CAT5e

Product properties

Product type	Injector
MTTF	2342 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	1167 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%)
	467 Years (SN 29500 standard, temperature 40°C, operating cycle 100%)

Electrical properties

Electrical isolation	VCC // FE // PoE
Maximum power dissipation for nominal condition	7 W (at 18 V DC)
	5 W (24 V DC ... 48 V DC)
Test voltage data interface/power supply	500 V (50 Hz, 1 min.)

Supply

Supply voltage range	18 V DC ... 57 V DC
Nominal supply voltage	24 V DC (SELV/PELV, restrictions for ATEX applications)
	48 V DC
Max. current consumption	2.1 A
	1.4 A (24 V DC, Ex areas in accordance with UL-HazLoc)
	0.7 A (48 V DC, Ex areas in accordance with UL-HazLoc)
Power consumption	≤ 40 W
Protective circuit	Reverse polarity protection

Function

Current	≤ 2 A
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Connection data

Supply

Connection method	Push-in connection
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
Single conductor/terminal point, rigid	0.2 mm ² ... 2.5 mm ²
Single-wire/terminal point, flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	20 ... 12
Stripping length	10.00 mm

Environmental and real-life conditions

Ambient conditions

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Degree of protection	IP20 (Manufacturer's declaration)
Ambient temperature (operation)	-40 °C ... 65 °C (75°C, observe derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 5000 m (For restrictions, see the manufacturer's declaration for altitude operation)
	≤ 2000 m (Restrictions for ATEX applications)
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Air pressure (operation)	80 kPa ... 110 kPa (Restrictions for ATEX applications)

Approvals

CE

Certificate	CE-compliant
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ATEX

Identification	Ⓜ II 3G Ex ec nC IIC T4 Gc
Certificate	PxCIF19ATEX2703009X
Note	Please follow the special installation instructions in the documentation!

UL, USA/Canada

Identification	Class I, Zone 2, AEx nA IIC T4, Ex nA IIC Gc X T4
	Class I, Div. 2, Groups A, B, C, D

UL, USA

Certificate	UL 60079-0 Ed. 6 / UL 60079-15 Ed. 4
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UL, Canada

Certificate	CSA 22.2 No. 60079-0 Ed. 3 / CSA 22.2 No. 60079-15:16
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Corrosive gas test

Identification	ISA-S71.04-1985 G3 Harsh Group A
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Power over Ethernet

Identification	IEEE 802.3af
	IEEE 802.3at

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
	FCC Part 15B Class A
	CISPR 22

Electrostatic discharge

Standards/regulations	EN 61000-4-2
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Electrostatic discharge

Contact discharge	± 6 kV (Test Level 3)
Discharge in air	± 8 kV (Test Level 3)
Indirect discharge	± 6 kV

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Comments	Criterion B
Electromagnetic HF field	
Standards/regulations	EN 61000-4-3
Electromagnetic HF field	
Frequency range	80 MHz ... 3 GHz (Test Level 3)
Field intensity	10 V/m
Comments	Criterion A
Fast transients (burst)	
Standards/regulations	EN 61000-4-4
Fast transients (burst)	
Input	± 2.2 kV (1 minute)
Signal	± 2.2 kV (1 minute)
Comments	Criterion B
Surge current load (surge)	
Standards/regulations	EN 61000-4-5
Surge current load (surge)	
Input	± 0.5 kV
Signal	± 1 kV (Data line, asymmetrical) ± 2 kV (I/O cable on field side only, asymmetric)
Comments	Criterion B
Conducted interference	
Standards/regulations	EN 61000-4-6
Conducted interference	
Frequency range	0.15 MHz ... 80 MHz
Comments	Criterion A
Voltage	10 V
Emitted interference	
Standards/regulations	EN 61000-6-4
Comments	Class A, industrial applications
Emitted interference	
Standards/regulations	EN 61000-6-3
Comments	Class B, domain of use: residential and small commercial
Criteria	
Criterion A	Normal operating behavior within the specified limits.
Criterion B	Temporary impairment to operational behavior that is corrected by the device itself.

System properties

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Functionality

Basic functions

PSE/Midspan, compliant with IEEE 802.3af, at

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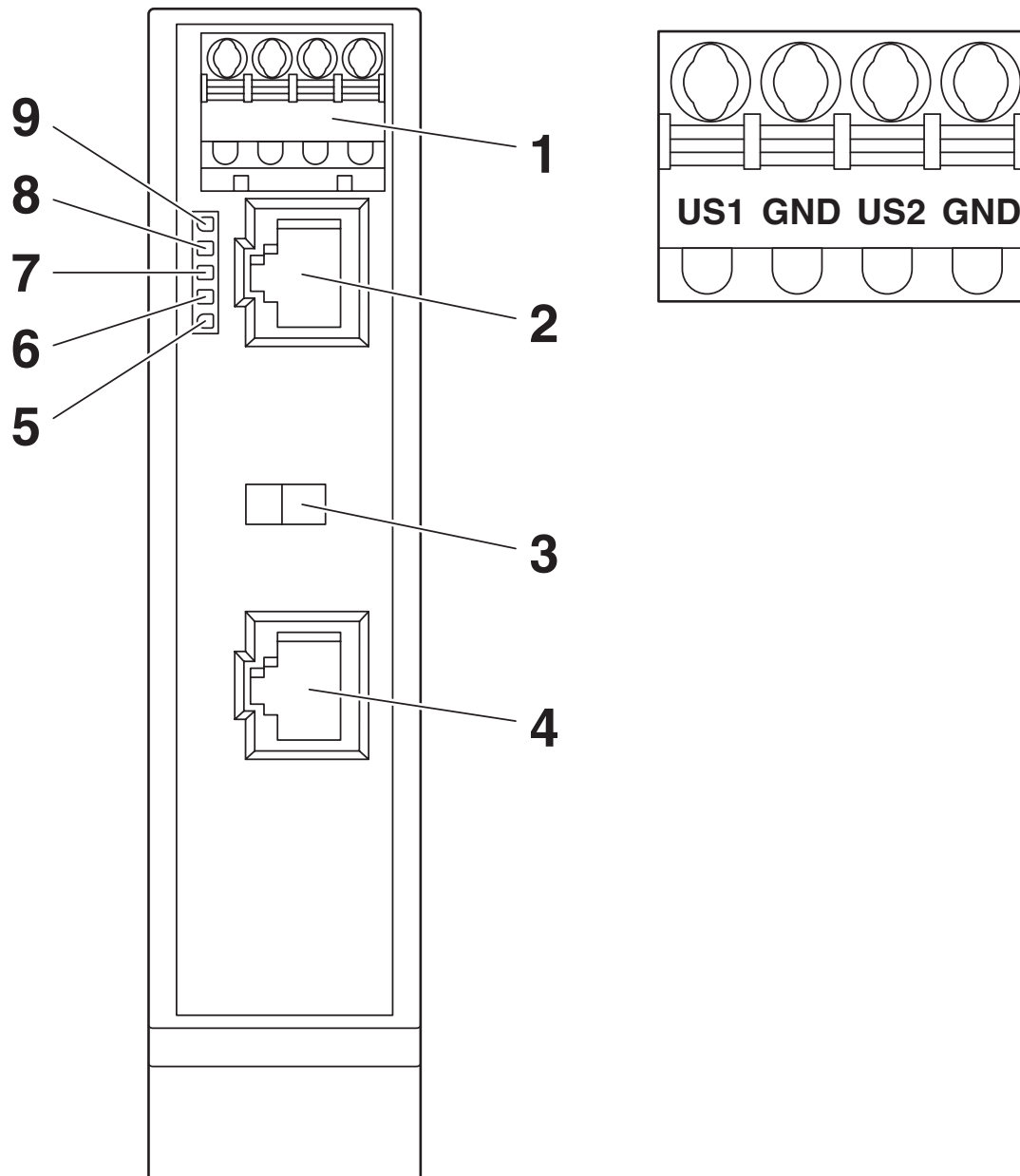
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Drawings

Schematic diagram



Front view

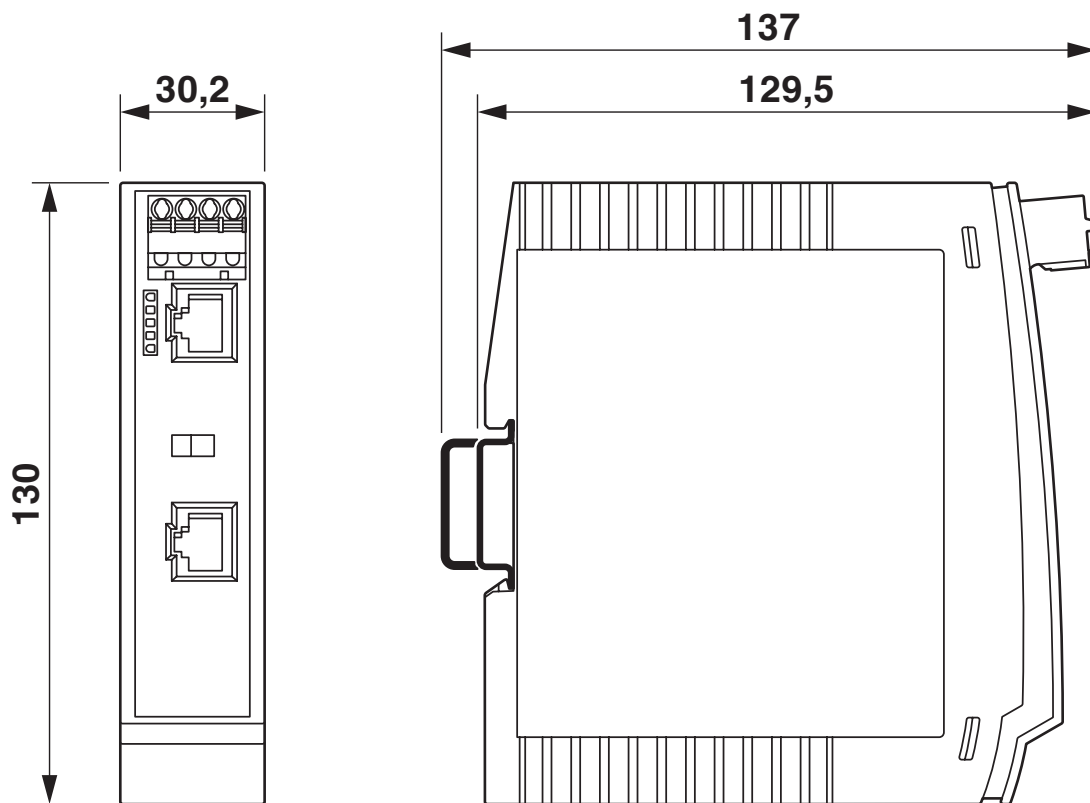
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Dimensional drawing



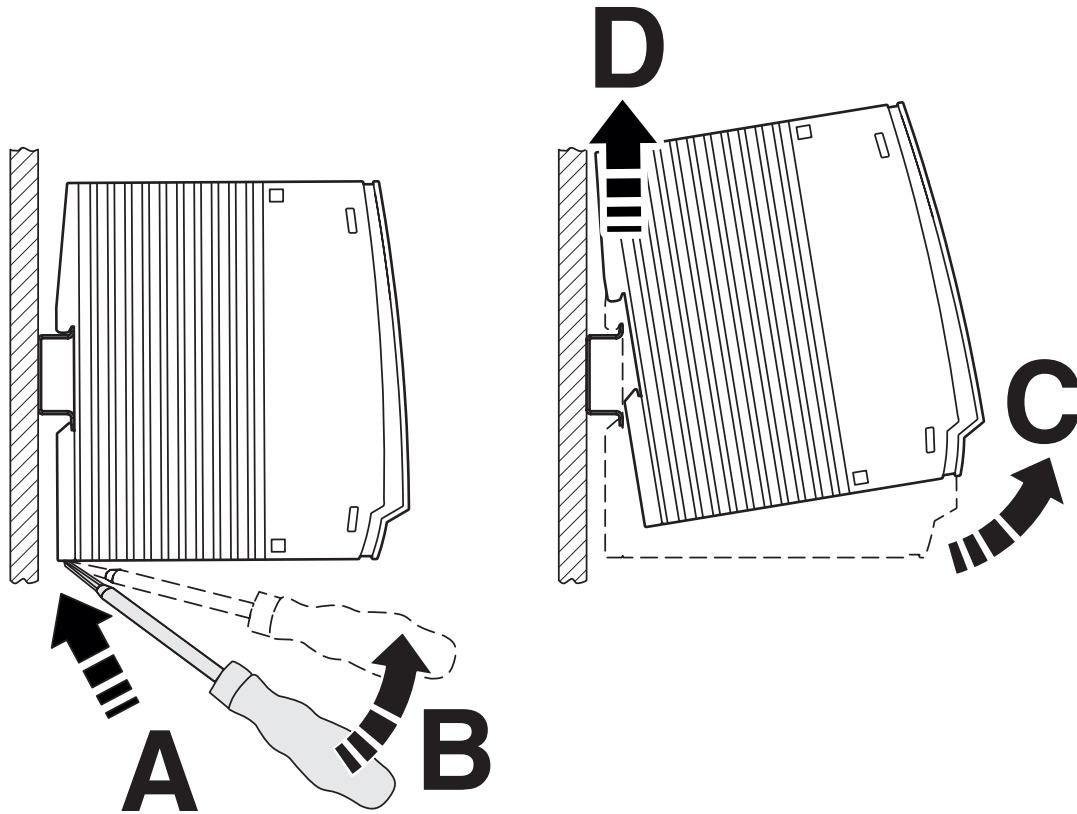
Housing dimensions

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Schematic diagram



Removal

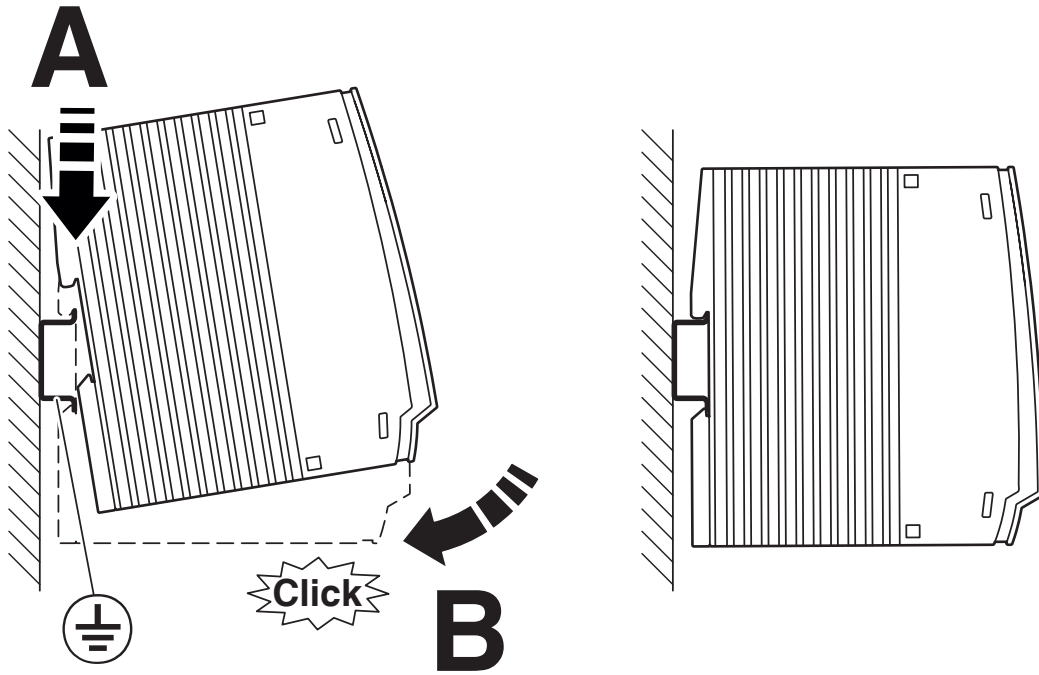
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Schematic diagram



Mounting

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Approvals

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 **UL Listed**
Approval ID: E238705

 **cUL Listed**
Approval ID: E238705

 **cUL Listed**
Approval ID: E366272

 **UL Listed**
Approval ID: E366272

cULus Listed

cULus Listed

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Classifications

ECLASS

ECLASS-11.0	19170112
ECLASS-12.0	19170112
ECLASS-13.0	19170112

ETIM

ETIM 9.0	EC001128
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UNSPSC

UNSPSC 21.0	43223300
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	13ffeb7-1634-4db8-acfb-4ec14abf0c82

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